



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/073,817      | 02/11/2002  | Michael Zahm         | WESTPHAL.6594       | 6360             |

7590 08/26/2004

Samuels, Gauthier & Stevens LLP  
Suite 3300  
225 Franklin Street  
Boston, MA 02110

|          |
|----------|
| EXAMINER |
|----------|

KOSTAK, VICTOR R

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2614

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/073,817

**Applicant(s)**

ZAHM ET AL.

**Examiner**

Victor R. Kostak

**Art Unit**

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 11 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/01/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 2614

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Note MPEP 606.01.
2. The drawings are objected to because block circuit 9 in Fig. 1 must be functionally labeled in compliance with rules 83(a) and 84(o). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The disclosure is objected to because of the following informalities: applicant discloses an *encoder* 8 rather than a *decoder* in the embodiment of Fig. 3. Upon reception of an A/V signal, the signal is normally decoded and processed for ultimate reproduction on a display screen (similar to the decoding by element 5 in Fig. 2).

Art Unit: 2614

Applicant may have intended to disclose a decoder instead, unless further transmission or storage processing is intended instead of immediate display.

Appropriate correction is required.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-19 and 24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the inventions defined by claims 1-12 and 20-24, does not reasonably provide enablement for the multiple filter control involving a field strength detector. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Only the embodiment shown in Fig. 1 includes a field strength detection stage 9. The other two embodiments, which involve plural filters, do not use a field strength detector.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 states that "*a video signal is contained in the video signal*" which does not seem to make sense. Applicant probably intended to recite a specific component as

Art Unit: 2614

being included in the video signal. Alternatively, if a second video signal distinct from the first is intended, applicant should designate the two differently.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Or (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Poppy.

The receiver of Poppy (noting Fig. 1) includes a tuner 11 that receives a signal from antenna 10; a selective filter stage 21 connected the tuner by intermediate stages 12 and 13 and electrically associated therewith; an IF stage 12 connected to the filter stage; field strength detection unit 23 that generates a signal proportional to the strength of the received (color component) signal which in turn generates a control signal therefrom (col. 3 lines 29-37; col. 4 lines 4-20); wherein the selection filter provides a transfer function dictated by the control signal (downstream to component stages 22, 27 and 28), thereby meeting claim 1.

As for claim 5, a black-and-white signal is contained in the received video signal, and when the signal strength is below a threshold, only black-and-white video is presented (the control signal activating color killer 28: col. 4 lines 15-20).

Art Unit: 2614

As for claim 6, the high frequency signals suppressed by the filter the are the color components.

7. Claims 1-4 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones.

The television receiver of Jones (noting Fig. 1) includes a tuner 11 connected to a filter stage 20-22 by way of IF amp 12 that receives a video signal from antenna 10; a field strength detector 14 generates a signal proportional to the strength of the received signal and then generates a control signal in response thereto; wherein the filter stage executes a transfer function that is modifiable by the control signal, thereby meeting claim 1.

As for claim 2, the bandwidth of the filter stage is modifiable by the control signal (noting element 20).

As for claim 3, the filter stage comprises a frequency trap 21, the slope of which modifiable by the control signal (through element 20: col. 4 lines 39-60; Figs. 3 and 4).

Regarding claim 4, both chrominance and luminance signals are contained in the received video signal, and the frequency trap is characterized by the color components being more suppressed in response to a higher field strength, whereas noise is reduced in the composite color and luminance signal when a lower field strength is detected (col. 4 line 61 – col. 5 line 11).

As for claim 24, a second stage is controlled (element 13), which serves as an amplitude filter in response to the control signal fed back by element 22, and is connected to IF stage 12.

8. Claims 1, 2, 7-13 and 18-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nohara et al.

Nohara discloses plural embodiments involving a television receiver (e.g. Fig. 1) that includes a receiving means 2 in which an inherent tuner provides a baseband video signal initially received by antenna 1. A selective filter (stabilizing means) 8 is connected to the tuner and an intermediate frequency stage is connected to the filter stage as part of the receiving means 2 (col. 12 lines 2-5). The IF stage is capable of detecting the field strength of the received video signal and in turn generates a control signal therefrom, wherein the filter stage implements a transfer function modifiable by the control signal (e.g. col. 12 lines 2-39), thereby meeting claims 1, 11, 20, 22 and 23.

As for claims 2, 12 and 21, the bandwidth of the selection filter is modified by the control signal (i.e., modifies the color and/or luminance bands differently and separately: e.g. col. 12 lines 22-32).

Regarding claim 7, it is inherent that when the field strength is not detected as being inadequate, filtering is accordingly not applied.

As for claim 8, the filtering must, by default, be processed either incrementally or continuously.

As for claim 9, the IF stage evaluates the field strength and generates the field strength signal (separate means 7 can also be used).

Considering claim 10, as noted above, the IF stage can include the field strength detection stage (noting again col. 12 lines 2-5).

Art Unit: 2614

As for claim 13, a second filtering stage (element 4) connected to the IF stage (of receiving means 2) is also incorporated.

As for claim 18, as pointed out above, the filters by default assume either a continuous function or incremental function.

Regarding claim 19, a second stage 10 downstream the IF stage 2 is used to further process the received video signal based on a control signal derived thereby.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nohara et al. in view of Jones.

As discussed above, the filter stage of Jones comprises a frequency trap 21, the slope of which modifiable by the control signal (through element 20: col. 4 lines 39-60; Figs. 3 and 4). Both Jones and Nohara focus on maintaining optimum signal presentation even when detected field strength is less than adequate.

Although Nohara does not disclose the typically included frequency trap in the receiver stage, it would have been obvious to one of ordinary skill in the art to modify such a frequency trap in alliance with the operation of Jones to maintain adequate signal response when the field strength is less than acceptable, the overall concern being keeping the ultimately displayed imagery in best presentable form, thereby meeting claim 14.



Art Unit: 2614

Similarly regarding claim 15 and 17, it would have been obvious to one of ordinary skill in the art to incorporate the trap of Jones in Nohara upon recognizing that the frequency trap is characterized by the color components being more suppressed in response to a higher field strength, whereas noise is reduced in the composite color and luminance signal when a lower field strength is detected (col. 4 line 61 – col. 5 line 11 of Jones).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nohara et al. in view of Poppy.

It would also have been obvious to one of ordinary skill in the art to include a color-killer stage in the receiver of Nohara as taught by Poppy so when the signal strength is below a threshold, only black-and-white video is presented (the control signal activating color killer 28: col. 4 lines 15-20 of Poppy), the basis of such consideration by one of ordinary skill in the art being to present a viewable signal minus any color noise, thereby at least displaying a noiseless black-and-white signal.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is 703 305-4374. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 308-HELP.



Victor R. Kostak  
Primary Examiner

Art Unit: 2614

Art Unit 2614

VRK